

OMNI VOLTAGE DIRECT CURRENT POWER SUPPLY

Abstract

A battery operated LED lighting apparatus including: a battery outputting a battery voltage; a light emitting diode or array of light emitting diodes; and a power supply including a boost regulating circuit. The power supply being in communication with the battery and the light emitting diodes such that a constant voltage or constant current is supplied to the light emitting diodes as the battery discharges and the battery voltage falls below the output voltage. In a preferred embodiment the power supply further includes a buck regulator to maintain the proper output voltage when the battery voltage is greater than the output voltage.